Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

1 to 25. (Canceled)

26. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising ~~the steps of~~:

providing a composite scaffold with a porous ceramic phase including a discrete ceramic layer, a porous polymer phase including a discrete polymer layer, the polymer phase attached to the ceramic phase at an interphase region where the polymer phase is at least partially infused into the ceramic phase mechanically interlocking the ceramic and polymer phases, with the porosity of the ceramic and polymer phases communicating, the interphase region being situated between the discrete ceramic layer of the porous ceramic phase and the discrete polymer layer of the porous polymer phase;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of articular cartilage; and

placing and securing the scaffold in the receptacle space with the ceramic phase adjacent to the bony tissue and the polymer phase adjacent to the cartilaginous tissue.

27. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising ~~the steps of~~:

providing a composite scaffold with a porous ceramic phase including a discrete ceramic layer, a porous polymer phase including a discrete polymer layer, the polymer phase attached to the ceramic phase at an interphase region where the polymer phase is at least partially infused into the ceramic phase mechanically interlocking the ceramic and polymer phases, with the porosity of the ceramic and polymer phases communicating, the interphase region being situated between the discrete ceramic layer of the porous ceramic phase and the discrete polymer layer of the porous polymer phase;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of a spinal disc; and

placing and securing the scaffold in the receptacle space with the ceramic phase adjacent to the bony tissue and the polymer phase adjacent to the cartilaginous tissue.

28. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising ~~the steps of~~:

providing a composite scaffold with a porous ceramic phase including a discrete ceramic layer, a porous polymer phase including a discrete polymer layer, the polymer phase attached to the ceramic phase at an interphase region where the polymer phase is at least partially infused into the ceramic phase mechanically interlocking the ceramic and polymer phases, with the porosity of the ceramic and polymer phases communicating, the interphase region being situated between the

discrete ceramic layer of the porous ceramic phase and the discrete polymer layer of the porous polymer phase;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of the meniscus; and

placing and securing the scaffold in the receptacle space with the ceramic phase adjacent to the bony tissue and the polymer phase adjacent to the cartilaginous tissue.

29. (Previously Presented) The method of Claim 26, wherein the polymer phase comprises a polymer foam.

30. (Previously Presented) The method of Claim 26, wherein the polymer phase is made from foaming by lyophilization.

31. (Previously Presented) The method of Claim 27, wherein the polymer phase is made from foaming by lyophilization.

32. (Previously Presented) The method of Claim 28, wherein the polymer phase is made from foaming by lyophilization.

33. (Previously Presented) The method of Claim 26, wherein the discrete ceramic layer of the porous ceramic phase is positioned on the top of the interphase region, and wherein the discrete polymer layer of the porous polymer phase is positioned on the bottom of the interphase region.

34. (Previously Presented) The method of Claim 33, wherein the discrete polymer layer of the porous polymer phase is positioned on only one side of the interphase region.

35. (Previously Presented) The method of Claim 27, wherein the discrete ceramic layer of the porous ceramic phase is positioned on the top of the interphase region, and wherein the discrete polymer layer of the porous polymer phase is positioned on the bottom of the interphase region.

36. (Previously Presented) The method of Claim 35, wherein the discrete polymer layer of the porous polymer phase is positioned on only one side of the interphase region.

37. (Previously Presented) The method of Claim 28, wherein the discrete ceramic layer of the porous ceramic phase is positioned on the top of the interphase region, and wherein the discrete polymer layer of the porous polymer phase is positioned on the bottom of the interphase region.

38. (Previously Presented) The method of Claim 37, wherein the discrete polymer layer of the porous polymer phase is positioned on only one side of the interphase region.

39. (New) The method of Claim 26, wherein the porous ceramic phase has a first plurality of pores, the porous polymer phase has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

40. (New) The method of Claim 27, wherein the porous ceramic phase has a first plurality of pores, the porous polymer phase has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

41. (New) The method of Claim 28, wherein the porous ceramic phase has a first plurality of pores, the porous polymer phase has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

42. (New) The method of Claim 26, wherein the interphase region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the porous polymer phase, the polymer phase interlocking with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.

43. (New) The method of Claim 27, wherein the interphase region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the porous polymer phase, the polymer phase interlocking with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.

44. (New) The method of Claim 28, wherein the interphase region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the

porous polymer phase, the polymer phase interlocking with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.